

**Remarks**

The Office Action mailed July 29, 2011 has been received and reviewed. Claims 15, 39-42, and 48 having been amended, and no claims having been added or canceled herein, the pending claims are claims 15-17, 30-32, and 34-48.

Independent claims 15, 39, 40, and 48 have been amended to further clarify that the recited methods form an article having a coated, porous surface. Claims 15, 39, 41-42, and 48 have also been amended to further clarify the description of the article in the claims.

Reconsideration and withdrawal of the rejections are respectfully requested.

**Rejections under 35 U.S.C. §103(a)**

The Examiner rejected claims 15, 30, 34, 38-42, 45, and 48 under 35 U.S.C. §103(a) as being unpatentable over Guillemet et al. (U.S. Patent No. 5,389,092) in view of Vachon (U.S. Patent No. 5,861,023) and Berlowitz-Tarrant et al. (U.S. Patent No. 5,840,387). Applicants respectfully traverse the rejection of claims 15, 30, 34, 38-42, 45, and 48 (as amended).

Guillemet et al. "relates to a dressing comprising a mixture of block copolymer with a saturated central sequence and plasticizer. The saturated central sequence has three sequences wherein the structure at each block is a polystyrene terminal block and the central sequence is a saturated polyolefin block" (Abstract of Guillemet et al.).

Applicants respectfully submit that Guillemet et al. lack, among other things, *coating a porous surface* with a composition including *at least one salt of a polysulfonated hydrogel* to form *an article having a coated, porous surface* as recited in present independent claims 15, 39, 40, and 48. Further, Applicants respectfully submit that Vachon, which "relates generally to implantable leads and particularly to transvenous defibrillator leads having thrombus-inhibiting, biocompatible materials coating or otherwise covering the shocking electrodes of such leads" (column 1, lines 7-11 of Vachon), fails to teach or suggest, among other things, *coating a porous surface* to form *an article having a coated, porous surface*.

Berlowitz-Tarrant et al. disclose sulfonated multiblock copolymers that are hydrogels, and infiltrating porous structures. However, Applicants respectfully submit that one of skill in the

art would lack the requisite motivation to modify Guillemet et al. with Berlowitz-Tarrant et al. as suggested by the Examiner, for at least the reasons discussed herein below.

First, Guillemet et al. disclose a healing "dressing with a matrix containing a block copolymer, according to the invention, comprises in its matrix 10 to 30 parts by weight of a block copolymer with a saturated central sequence, especially polystyrene/polyethylene-butylene/polystyrene, and 70 to 90 parts by weight of plasticizer, especially petrolatum" (column 2, lines 28-33 of Guillemet et al.). Guillemet et al. further disclose that "it is possible to add a web embedded in the mass resulting from the mixing of the block copolymer with a saturated central sequence, and the plasticizer. Such a web can consist of natural or man-made fibers, for example woven or non-woven cotton or polyamide fibers. ***It is important for the web to be totally embedded in the mass forming the dressing,*** so as to exclude any possibility of adhesion of the fibers to the wound" (column 3, lines 7-15 of Guillemet et al.; emphasis added). Thus, Guillemet et al. clearly ***excludes the possibility of a porous, fibrous dressing.***

Second, Guillemet et al. not only lacks any teaching or suggestion of ***coating a porous surface*** to form ***an article having a coated, porous surface***, Guillemet et al. also lacks any teaching or suggestion of using a coating composition that includes ***a hydrogel***, much less at least one ***salt of a polysulfonated hydrogel***. Notably, Applicants respectfully submit that one of skill in the art would recognize that the polystyrene/polyethylene-butylene/polystyrene copolymers (i.e., non-sulfonated polymers) disclosed by Guillemet et al., which lack the salt form recited in independent claims 15, 39, 40, and 48, are not capable of forming hydrogels. Even further, such polystyrene/polyethylene-butylene/polystyrene copolymers lack the acid form recited in preferred methods of forming coatings in the present application (e.g., dependent claims 16 and 43).

Moreover, Applicants respectfully submit that Guillemet et al. actually teach away from using a coating composition that includes a hydrogel. Specifically, Guillemet et al. teach that "[t]he principal families of dressings are dry gauzes, tulles gras, occlusive films and absorbent occlusive dressings" (column 1, lines 11-13 of Guillemet et al.). "[T]he healing dressing according to the invention protects the wound from the external environment and retains the

exudates" (column 2, lines 20-22 of Guillemet et al.). In contrast, Guillemet et al. discuss hydrocolloidal dressings:

By virtue of its composition, the adhesive mass of such [hydrocolloidal] dressings is converted to a moist soft gel on contact with the wound, thereby developing a microenvironment favorable to cell multiplication, collagen synthesis, fibrinolysis, angiogenesis and good progression of the wound's bacterial cycle.  
***Despite this favorable microclimate, the results of healing studies on this type of dressing remain divided. Healing is not always accelerated to a significant degree.***

(Column 1, lines 60-68 of Guillemet et al.). In view of this disclosure, Applicants respectfully submit that one of skill in the art would be discouraged from modifying Guillemet et al. to use a coating composition that includes a hydrogel. "[A] reference that 'teaches away' from a given combination may negate a motivation to modify the prior art to meet the claimed invention. . . . A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *Ormco Corp. v. Align Technology Inc.*, 79 U.S.P.Q.2d 1931, 1938 (Fed. Cir. 2006).

For at least these reasons, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of unpatentability for claims 15, 30, 34, 38-42, 45, and 48 (as amended) being obvious over Guillemet et al. in view of Vachon and Berlowitz-Tarrant et al.

The Examiner rejected claims 15-16, 30, 34-43, 45-46, and 48 under 35 U.S.C. §103(a) as being unpatentable over Berlowitz-Tarrant et al. (U.S. Patent No. 5,840,387) in view of Guillemet et al. and Svenningsen et al. (U.S. Publication No. 2002/0115744 A1). Applicants respectfully traverse the rejection of claims 15-16, 30, 34-43, 45-46, and 48 (as amended).

The deficiencies of the combination of Belowitz-Tarrant et al. and Guillemet et al. as applied to independent claims 15, 39, 40, and 48 have been discussed herein above. Further, Applicants respectfully submit that Svenningsen et al., which relates to antimicrobial hot melt

adhesive (Title of Svenningsen et al.), fail to provide that which is missing from Belowitz-Tarrant et al. in view of Guillemet et al.

For at least this reason, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of unpatentability for claims 15-16, 30, 34-43, 45-46, and 48 (as amended) being obvious over Berlowitz-Tarrant et al. in view of Guillemet et al. and Svenningsen et al.

The Examiner rejected claims 15, 31-32, 40, and 44-47 under 35 U.S.C. §103(a) as being unpatentable over Berlowitz-Tarrant et al. in view of Svenningsen et al. and Shalaby (U.S. Patent No. 6,413,539). Applicants respectfully traverse the rejection of claims 15, 31-32, 40, and 44-47 (as amended).

The deficiencies of the combination of Belowitz-Tarrant et al. and Svenningsen et al. as applied to independent claims 15 and 40 have been discussed herein above. Further, Applicants respectfully submit that Shalaby, which discloses **polyester** block copolymers, fails to provide that which is missing from Belowitz-Tarrant et al. in view of Svenningsen et al.

For at least this reason, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of unpatentability for claims 15, 31-32, 40, and 44-47 (as amended) being obvious over Berlowitz-Tarrant et al. in view of Svenningsen et al. and Shalaby.

The Examiner rejected claims 15 and 17 under 35 U.S.C. §103(a) as being unpatentable over Berlowitz-Tarrant et al. in view of Svenningsen et al. and Cohen et al. (U.S. Patent No. 2,676,896). Applicants respectfully traverse the rejection of claims 15 and 17 (as amended).

The deficiencies of the combination of Belowitz-Tarrant et al. and Svenningsen et al. as applied to independent claim 15 have been discussed herein above. Further, Applicants respectfully submit that Cohen et al., which fail to teach or suggest **block** copolymers, fail to provide that which is missing from Belowitz-Tarrant et al. in view of Svenningsen et al.

For at least this reason, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of unpatentability for claims 15 and 17 (as amended) being obvious over Berlowitz-Tarrant et al. in view of Svenningsen et al. and Cohen et al.

**Amendment and Response**

Application No.: 10/691,117

Confirmation No.: 5330

Filed: October 21, 2003

For: SULFONATED STYRENE COPOLYMERS FOR MEDICAL USES

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Reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) are respectfully requested.

**Summary**

It is respectfully submitted that all the pending claims are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicants' Representatives at the telephone number listed below if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted

By

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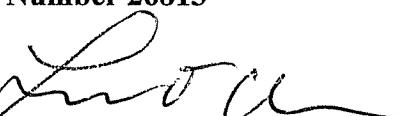
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**CERTIFICATE UNDER 37 CFR §1.8:**

The undersigned hereby certifies that this paper is being transmitted via the U.S. Patent and Trademark Office electronic filing system in accordance with 37 CFR §1.6(a)(4) to the Patent and Trademark Office addressed to the Commissioner for Patents, Mail Stop Amendment, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8<sup>th</sup> day of November, 2011.

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